

**PERFORMANCE PARTNERSHIP AGREEMENT
PERFORMANCE MEASURES**

FEDERAL FISCAL YEARS 2001 AND 2002

PUBLIC WATER SUPPLY SUPERVISION PROGRAM

U.S. ENVIRONMENTAL PROTECTION AGENCY

AND

CT DEPARTMENT OF PUBLIC HEALTH

WATER SUPPLIES SECTION

February 1, 2001
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EXECUTIVE SUMMARY

The Government Performance and Results Act of 1993 mandated that all Federal agencies deploy effective performance measurement and performance management systems. In March, 1995, Performance Partnership Grants and Agreements were created under the Administration's program to "Reinvent Environmental Regulation," to bring the States into the performance management movement currently underway at the Federal level.

Since 1998, the CT Department of Public Health (DPH) has used the Performance Partnership Agreement (PPA) format to procure annual Federal funds for the Public Water Supply Supervision Program (PWSS) administered by the Department's Water Supplies Section (WSS). This FFYs 2001 and 2002 PPA is a modification of the previous applications, representing a more direct, simplified approach. Lessons learned from the 1998, 1999 and 2000 PPAs have resulted in a reduction of indicators and a sharper focus on needed program elements.

The Performance Measures discussed in this application consist of five (5) goals, categorized by Objective Indicators that are either qualitative or quantitative. Qualitative goals have direct relationships to programmatic development and performance, such as the Source Water Assessment Program (SWAP). Quantitative Objective Indicators were developed to provide relevant numerical measures of events, actions or results. When evaluated, these measures serve to help the program areas of responsibility assess performance. Objectives have also now been categorized by system type, i.e., community water system; non-transient, non-community water system; and transient, non-community water system, to more appropriately judge necessary future focus. Goal 5 consists of short-term program projects, e.g., new program start up activities, regulatory tracking, etc. Once programs are established as routine, the objective(s) can be considered for incorporation into longer term, Goals 1-4, as appropriate.

Central to assessing the PPA is a separate calendar year reporting system for the Performance Measures. Quantitative Indicators will be provided in a spreadsheet reporting format. A final report, produced separately from the PPA application process will serve as a basis for the Section's internal program reviews and modifications. Final reporting of each PPA will be provided by April 1st following the final Calendar Year of the PPA.

The FFYs 2001 and 2002 PPA is a two year agreement and has been modified to reflect past experience with the process. Objectives and indicators in the FFYs 2001 and 2002 PPA are based on an evaluation of previous years indicators that demonstrated deletions were necessary to reduce areas of duplication and streamline the process. Modifications were also necessary to include new program activities such as the Transient, Non-community program.

Required Core Performance Measures (CPMs) and Associated Reporting Requirements (ARRs) for Water are included separately to facilitate EPA's review of this PPA. Inclusion also allows for assessing program success against the national measures of performance.

The WSS's experience with the PPA has been positive, with significant achievement made toward all CPMs, ARR's and the program's defined goals. It is the intent of this FFYs 2001 and 2002 PPA Agreement to continue the progress and direction made during FY 2000.

FFYs 2001-2002 PPA

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SECTION ONE:

PERFORMANCE MEASURES

- I. The Federal Environmental Protection Agency's Core Performance Measures (CPMs) and Associated Reporting Requirements (ARRs) for the drinking water program must be included in FFYs 2001 and 2002 Performance Partnership Agreement (PPA). They are included separately to facilitate EPA's review of this Agreement.
- II. The FFYs 2001 and 2002 Program Performance Measures (PPM) to be used by the DPH for the Water Supplies Program consist of a Mission, Goals*, Objectives and Indicators. Items have been modified or deleted in the FFYs 2001 and 2002 PPA as a result of analyses of data or information collected from the FY 2000 PPA and as previously reported to EPA.

*Goals are not listed in priority order

I. Introduction

Annually, the CT Department of Public Health (CTDPH) receives a Public Water Supply Supervision (PWSS) grant of approximately \$1.4 million from the U.S. Environmental Protection Agency (EPA) to support the Public Water Supply Program administered by the Water Supplies Section (WSS).¹ The Section is part of the Department's Division of Environmental Health in the Bureau of Regulatory Services.

For FFYs² 2000 and 2001, CT is participating in the PPA process. In the PPA, the performance measures and the assessment form a singular strategic planning document that sets the long and short-term direction for the PWSS Program. It also provides a mechanism for program evaluation and change. The Section has decided to include innovative, as well as required programmatic elements within its PPA. The phrase "drinking water program" is used to refer to all programmatic elements administered by the Section.

II. PUBLIC WATER SYSTEMS AND SOURCES IN CT

CT is one of the smallest States in the United States. It has 3.4 million people living in a land area of 4,844 square miles. Even though CT is small, it is home to over 3,400 public water systems.³ Community water systems (CWS) are systems that serve at least 25 individuals on a year round basis. Approximately eighty four percent, or 2.8 million of CT's population of 3.4 million, are served by CWSs.

The majority of CT's community systems are small, serving populations between 25 and 1,000. Approximately 4% of CT's population are served by small systems; serving primarily suburban and rural areas. Large systems serve populations over 1,000, or 96% of CT's population. For the most part, these ninety-five large CWSs provide public supplies to urbanized areas such as Hartford, Bridgeport and New Haven,

Approximately 64% of CT's population is served by large CWSs that possess the capability to deliver both ground and surface water supplies. Twenty-one percent of large systems in CT rely exclusively on surface supplies.

Public water supply watershed land surrounding these surface supplies is located in 128 of the State's 169 municipalities. Seventeen percent or 824 square miles of CT's total land area is water supply watershed. Seventy six percent of this watershed land is relatively underdeveloped and forested indicating a high level of protection for surface supplies in these areas. The State's three largest public water suppliers own significant amounts of the watershed land surrounding their active surface supplies.

Small CWSs as well as non-transient non-community systems (NTNC) predominately use groundwater as their source of supply. NTNC water systems in CT serve at least 25 people on a part-time basis at places like schools

¹ Total annual funding for the Section, exclusive of the Drinking Water Revolving Fund (DWSRF), amounts to approximately \$2.5 million.

Contributing funds come from EPA, a Federal Public Health Services Block Grant, and the State General Fund. Funding from the State General Fund provides a required in-kind match for the EPA grant.

² The Federal Fiscal Year runs from October 1-September 30.

³ The data for this profile is from the SDWIS Inventory of Public Water Systems, Water Supplies Section, Department of Public Health.

and office buildings. A small percentage of the NTNC systems serve populations over 1,000. Over 2,400 public water systems are classified as transient non-community systems such as restaurants and parks. They provide service to populations of at least 25 people that are transient and temporary.

Identification and confirmation of NC systems throughout the State has significantly expanded the WSS inventory of public water systems. In particular, it has highlighted the fact that public drinking water systems in CT are dominated by small systems, which serve populations between 25 to 1,000, and tend to cluster.

III. THE WATER SUPPLIES SECTION

Currently the WSS staff of approximately 49 is organized into 9 functional units: Administration; Office Support; Outreach; Data Management; 3 Regional Engineering Units; a Non-Community Program, and a Planning Unit. Through a supervisor, each unit reports directly to the Section Manager. The Section Manager in turn reports directly to the Division Director of Environmental Health, who in turn, reports to the Bureau Chief of Regulatory Services, who reports to the DPH Commissioner.

The WSS maintains oversight of public water systems for water quality monitoring and reporting, approval of treatment, infrastructure upgrades, new sources, and completion of sanitary surveys. Enforcement of Federal and State drinking water mandates and the SWAP are also the responsibility of the WSS.

IV. THE DRINKING WATER PROGRAM

CT uses a multiple approach to protecting and preserving public drinking water supplies.⁴ It consists of a variety of proactive approaches: (a) source protection; (b) treatment systems and water quality assurance; (c) distribution systems and overall system integrity; (d) water supply planning; (e) support elements for program activities. The Department has statutory and regulatory jurisdiction over public water systems for each of these multiple barrier programmatic elements. Each element is described below.

A. Source Protection

Review of sanitary survey reports of watersheds- Community suppliers with active surface supplies must conduct an annual sanitary survey of their watersheds and submit reports of these surveys to the Department for review.

Water Company Owned Lands Permits- These permits cover change in ownership and change in use of water company owned land that is classified as Class I, or II. These classifications are distinguished primarily by proximity to the source and to tributary streams.

Recreation Permits- These permits cover low impact recreational activities such as hiking and fishing on public water supply reservoirs and associated watersheds.

SWAP - The DPH and the DEP have a partnership in developing and implementing this SDWA mandate funded under the DWSRF. With DPH serving as the lead Agency, the program's components include delineation of public water supply sources, an inventory of land use activities that may affect water quality and a susceptibility analysis of existing and potential contaminants.

In 2001, under the Planning Unit, \$240,000 has been contracted to USGS to support the SWAP assessments and 3 new positions are being created to staff this unit.

⁴ Mathieu, "CT's Public Water Supply Watersheds," pgs. 733-737, includes a full discussion of all statutes related to source protection of drinking water supplies.

B. *Treatment Systems and Water Quality Assurance*

Review and approval of all proposed treatment- The Section reviews and approves all treatment proposed by public water systems to correct exceedances of maximum contaminant or action levels or to mitigate water quality concerns related to aesthetics.

Oversight of mandatory filtration of all surface water supplies- Under the Surface Water Treatment Rule, all public water systems in CT have been required to filter their surface supplies. WSS has reviewed and approved all filtration plants constructed or upgraded as a result of the rule. The majority of surface supplies in CT have been filtered, or replaced by groundwater sources, with only the Ridgefield system remaining at this time.

Oversight of the Certified Treatment Operator Program- All public water systems that treat sources of supply are required to employ a certified operator. The Section issues certifications for treatment operators based on criteria established in regulation. WSS also exercises quality control over the certification examination. Under the 1996 SDWA amendments, Operator Certification guidelines were developed which has revised the current program. Regulatory changes in 2001 include the requirement for all community water systems and all non-transient, non-community water systems to have certified operators, the addition of the Small System Operator category, and specific training hour requirement. Regulations have been adopted to accommodate these changes and the program, as required by the SDWA, has been submitted to EPA prior to the February 5, 2001 deadline.

Review of Water Quality Reports- Annually, WSS reviews approximately 12,000 required water quality test results submitted by public water systems for compliance with standards in the Public Health Code. Data management, in 2000, has resulted in incorporation of the SDWIS FED reporting system. The NC program has been more aggressive in this area with a reconfiguration of the unit's organization and revised strategy as reflected in CT's EPA approved Capacity Development strategy.

C. *Distribution Systems and Overall System Integrity*

Sanitary Surveys- On an annual basis, WSS inspects one-third of active community water systems and one-fifth of non-transient, non-community water systems; for TNC's a portion of the DWSRF 2% Technical Assistance Program Setaside funds was used in 2000 and 2001. During these sanitary surveys, staff check the conditions of the system, record violations of the Public Health Code, and provide technical assistance for improvement of system deficiencies and correction of violations.

Review and approval of engineering plans and specifications- WSS reviews and approves all proposals for public water system infrastructure upgrades, expansions or new installations. The advent of the DWSRF will increase the number of plans and specifications submitted to WSS for review and approval. It will also expand the review process by adding cost considerations and contract compliance to it. WSS has completed a guidance document on treatment plant and distribution system design criteria.

Oversight of Operator Certification Programs for Distribution System Operators, Backflow Prevention Device Testers and Cross Connection Survey Inspectors.

With assistance from the New England Water Works Association, the Association of Boards of Certification (ABC) and the Cross Connection Control Committee of the CT Section of the American Water Works Association, WSS coordinates and administers all certifications. Currently, regulations related to certification qualifications have been proposed that allow for increased professional participation in training and testing.

Departmental oversight of the qualifications of individuals who operate and maintain public water supply systems dates back to 1937. The experience gained by this long history has resulted in a comprehensive certification program that is recognized at the national level. In fact, Section Staff served, at EPA's invitation, on national forums convened to make recommendations to EPA on new SDWA requirements for operator certification.

D. Water Supply Planning

Review and approval of water supply plans- The Section reviews and approves all individual water supply plans required of community water systems serving a population of 1,000 or more. This review and approval evaluates the system's long-term supply adequacy, demand projections, overall system performance, emergency and conservation contingencies, and source protection strategies. WSS staff extend a considerable amount of technical assistance to water companies during plan preparation and also during the review and modification process.

Facilitation and oversight of the WUCC planning- The WUCC acronym stands for the Water Utility Coordinating Committees which are convened and facilitated by WSS for the purpose of producing a comprehensive long range water supply plan that discusses water quality and water quantity issues for each of the State's seven management areas. WUCCs have been established in four of the seven management areas to date. The Southeast WUCC will complete its plan in 2001. Each WUCC is comprised of representatives from public water systems and regional planning agencies within the area. Once the committee is convened, they will have two years to prepare a coordinated, areawide water supply plan. The WUCC process is a complicated and comprehensive one in which all public water systems and regional planning agencies are invited to participate. On the part of WSS, it entails a significant amount of organization and time in addition to a massive compilation of data from WSS files. To this end in 2001, 3 new staff have been hired to conduct this process and indirectly support the SWAP.

E. Support Elements for Program Activities

The following programs provide section-wide support and coordination. They include:

- Data Management
- Enforcement
- Public Outreach
- Laboratory Certification

Supplemental Program Elements:

WSS staff perform a number of activities that augment the major programmatic elements of the multiple barrier approach to protecting and preserving public drinking water supplies including:

- Issuance of Well Permit Exceptions.
- Issuance of Sale Of Excess Water Permits.
- Issuance of Stormwater Drainage Permits.
- Submittal of comments to municipalities on proposed development projects within public water supply watersheds.
- Review and approval of new public water systems under the Certificate of Public Convenience and Necessity process administered by the DPUC.
- Preparation and delivery of testimony for acquisition and receivership of public water companies under DPUC proceedings.
- Oversight of Water Quality for Private Residential Wells Regulations.
- Participation in environmental reviews under the CT Environmental Policy Act.

V. THE STRUCTURE OF THE PERFORMANCE PARTNERSHIP AGREEMENT

The performance measures originally proposed by WSS in FFY 1998, and continued into the FFYs 2001 and 2002 PPA, consist of a mission, goals, objectives and indicators. The purpose of the PPA is to emphasize management based on measures of performance that are directly related to desired outcomes. Mission, goals and objectives express these outcomes while the indicators measure progress towards the objectives. The PPA also requires an assessment of attainment of the Performance Measures. Each Agreement's final report will incorporate such an assessment.

The PPA specifically measures the previous year's activity as identified by the Section. The following criteria governed WSS development of the PPA:

- Recognition of EPA's core concepts including compliance, enforcement and protection of public health.
- Identification by DPH, the primacy agency, of innovative State programmatic elements for inclusion in the PPA, thereby acknowledging allowance for State flexibility.
- Identification of programmatic elements where there is a defined need to focus attention, improve performance, or investigate possible changes or modifications.
- Development of goals, objectives, and indicators that serve as discussion points in the final report.
- The final report covers past, present, and future characterization of each item and also articulates a definition of EPA's role.

For the Performance Measures, the following definitions apply:

- Mission- Represents the Section's enduring statement of purpose.
- Goals One through Four- State desired outcomes integral to achieving the mission. They are long-term in orientation.
- Goal Five- Consists of short term Section initiatives.
- Objectives- State desired outcomes integral to achieving the goal.
- Indicators- State a quantitative or qualitative measure of performance. They report progress towards achieving the objective and are short-term in orientation. The majority of the indicators express activity outputs.

Each of the performance measures are interrelated, presenting a picture of the Section's operational performance. The Assessment which will be provided for this Agreement, will cover the Calendar Years 2000 and 2001 and will be submitted in Spring, 2002.

VI. MISSION: TO PROTECT PUBLIC HEALTH BY ENSURING THE PURITY AND ADEQUACY OF DRINKING WATER SUPPLIES, NOW AND IN THE FUTURE

CT General Statutes Sec. 25-32 grants DPH jurisdiction over all matters concerning the purity and adequacy of drinking water. The mission statement mirrors DPH's statutory authority.⁵ Acting on behalf of the Department, WSS protects public health through regulatory oversight of public water systems throughout the State. In the course of a day, virtually every CT resident as well as many others who visit the State, come into contact with drinking water provided by a public water system. It is the Department's mission to influence, through regulation and communication, the behavior of public water systems so that they take all necessary precautions to protect and preserve sources and systems of drinking water supply. The desired outcome is to maintain the State's record of zero outbreaks of waterborne disease.

This mission statement remains valid for the FFYs 2001 and 2002 PPA and is consistent with the intent of the SDWA, Core Performance Measures and national policies toward source protection and public involvement.

⁵ Developing a mission based on statute is recommended in, American Society for Public Administration Government Accomplishment and Accountability Task Force, "Government's Learn about Performance Measurement," *Public Administration Times*, August, 1996, p. 10. The conceptual framework for development of the Section's performance measures is from, Robert S. Kravchuk and Ronald W. Schack, "Designing Effective Performance Measurement Systems Under the Government Performance and Results Act of 1993," *Public Administration Review*, p. 194. July/August, 1996), pgs. 348-358.

FFYs 2001 and 2002
VII.PERFORMANCE MEASURES SUMMARIZED
SECTION I - BASE PROGRAM

MISSION: TO PROTECT PUBLIC HEALTH BY ENSURING THE PURITY AND ADEQUACY OF DRINKING WATER SUPPLIES NOW AND IN THE FUTURE.

GOAL ONE: MINIMIZE RISK OF CONTAMINATION OF PUBLIC WATER SOURCES AND SYSTEMS THROUGH PREVENTIVE AND PROTECTIVE ACTIVITIES

Objective One: Reduce risk of contamination by improving elements of the Section's Cross Connection Control Program.

GOAL TWO: MAXIMIZE COMPLIANCE WITH WATER QUALITY STANDARDS.

Objective One: To Increase community water system (CWS) compliance with water quality monitoring, reporting, and water quality standards, and to decrease the number of systems on EPA's Target and Significant Non-Complier Lists.

Objective Two: To Increase non-transient, non-community water system (NTNC) compliance with water quality monitoring, reporting, and water quality standards, and to decrease the number of systems on EPA's Target and Significant Non-Complier Lists.

Objective Three: To Increase transient, non-community water system (TNC) compliance with water quality monitoring, reporting, and water quality standards, and to decrease the number of systems on EPA's Target and Significant Non-Complier Lists.

GOAL THREE: MAXIMIZE THE NUMBER OF PUBLIC WATER SYSTEMS PROVIDING AND MAINTAINING ADEQUATE INFRASTRUCTURE.

Objective One: Maximize the number of community water systems with existing treatment systems providing a water quality that meets Public Health Code Standards.

Objective Two: Maximize the number of non-transient, non-community water systems with existing treatment systems providing a water quality that meets Public Health Code Standards.

Objective Three: Review all plans and specifications for non-community water system infrastructure improvements in a consistent and timely manner.

Objective Four: Maximize correction of Public Health Code violations of community water systems identified in sanitary surveys.

Objective Five: Maximize correction of Public Health Code violations of non-transient, non-community water systems identified in sanitary surveys.

GOAL FOUR: MAINTAIN AN EFFECTIVE PUBLIC WATER SUPPLY SUPERVISION PROGRAM THAT SUPPORTS IDENTIFIED MISSION, GOALS, AND OBJECTIVES.

Objective One: Implement elements of the proposed organizational plan that maintains an effective Public Water Supply Supervision Program.

Objective Two: Implement the integrated Information Management System.

Objective Three: Increase the Water Supplies Section's capacity and provide information and technical assistance to CT's drinking water constituencies

GOAL FIVE: DEVELOPMENT AND IMPLEMENTATION OF SHORT-TERM PROGRAM INITIATIVES

Objective One: Develop and implement a Source Water Assessment Program consistent with SDWA requirements

Objective Two: Modify existing state regulations and develop new regulations necessary to maintain primacy and protect public health using the established regulatory review procedures

Objective Three: Development of a Quality Assurance Project Plan in Cooperation with Region 1 New England States

Objective Four: Develop and Implement a Transient Non-Community Program Consistent with the Safe Drinking Water Act Requirements

Objective Five: Develop an Outreach Strategy to Assist Systems to Obtain and Maintain Capacity

**VIII.PERFORMANCE PARTNERSHIP AGREEMENT
PERFORMANCE MEASURES-FFYs 2001 and 2002**

(Footnotes refer to definitions.)

GOAL ONE: MINIMIZE RISK OF CONTAMINATION OF PUBLIC WATER SOURCES AND SYSTEMS THROUGH PREVENTIVE AND PROTECTIVE ACTIVITIES

OBJECTIVE ONE: Reduce risk of contamination by improving elements of the Section's Cross Connection Control Program.

INDICATORS:

- 1a.) # of cross connection reports required:
- 1b.) # of cross connection reports submitted

- 2a.) # of cross connection reports reviewed:
- 2b.) # of unsatisfactory cross connection reports submitted:¹

- 3.) # of unsatisfactory cross connection reports addressed:³
- 4a.) # of reports with uncorrected cross connection violations addressed:²
- 4b.) # of reports with uncorrected cross connection violations:

GOAL TWO: MAXIMIZE COMPLIANCE WITH WATER QUALITY STANDARDS.

OBJECTIVE ONE: To Increase community water system (CWS) compliance with water quality monitoring, reporting, and water quality standards, and to decrease the number of systems on EPA's Target and Significant Non-Complier Lists*

INDICATORS:

- 1.) # of CWSs monitored

- 2.) # of CWSs issued non-reporting violations

- 3a.) # of CWSs issued MCL violations
- 3b.) Population affected by MCL violations

- 4a.) # of CWSs on EPA's quarterly SNC list
- 4b.) # of CWSs on EPA's SNC list issued fea's
- 4c.) # of CWSs on EPA's SNC list returned to compliance

- 5a.) # of CWSs on EPA's annual Target list
- 5b.) # of CWSs on EPA's annual Target list returned to compliance

OBJECTIVE TWO: To Increase non-transient, non-community water system (NTNC) compliance with water quality monitoring, reporting, and water quality standards, and to decrease the number of systems on EPA's Target and Significant Non-Complier Lists*

INDICATORS:

- 1.) # of NTNCs monitored

- 2.) # of NTNCs issued non-reporting violations

- 3.) # of NTNCs issued MCL violations

- 4a.) # of NTNCs on EPA's quarterly SNC list
- 4b.) # of NTNCs on EPA's SNC list issued fea's
- 4c.) # of NTNCs on EPA's SNC list returned to compliance

- 5a.) # of NTNCs on EPA's annual Target list
- 5b.) # of NTNCs on EPA's annual Target list returned to compliance

OBJECTIVE THREE: To Increase transient, non-community water system (TNC) compliance with water quality monitoring, reporting, and water quality standards, and to decrease the number of systems on EPA's Target and Significant Non-Complier Lists*

INDICATORS:

- 1a.) # of TNCs monitored
- 1b.) # of TNCs submitting all required water quality reports
- 2.) # of TNCs issued non-reporting violations
- 3.) # of TNCs issued MCL violations
- 4a.) # of TNCs on EPA's quarterly SNC list
- 4b.) # of TNCs on EPA's SNC list issued fea's
- 4c.) # of TNCs on EPA's SNC list returned to compliance
- 5a.) # of TNCs on EPA's annual Target list
- 5b.) # of TNCs on EPA's annual Target list returned to compliance

*This will be accomplished by providing proactive technical assistance, issuing violations, and taking formal enforcement actions

GOAL THREE: MAXIMIZE THE NUMBER OF PUBLIC WATER SYSTEMS PROVIDING AND MAINTAINING ADEQUATE INFRASTRUCTURE

OBJECTIVE ONE: Maximize the number of community water systems (CWS) with existing treatment systems providing a water quality that meets Public Health Code standards

INDICATORS:

- 1a.) # of CWSs without certified treatment operators.
- 1b.) # of CWSs required to have certified treatment operators.
- 1c.) # of CWSs returned to compliance.
- 2a.) # of CWSs not meeting treatment requirements.⁹
- 2b.) # of CWSs that need to meet treatment requirements.
- 2c.) # of CWSs returned to compliance.

OBJECTIVE TWO: Maximize the number of non-transient, non-community (NTNC) water systems with existing treatment systems providing a water quality that meets Public Health Code standards

INDICATORS:

- 1a.) # of NTNC water systems without certified treatment operators.
- 1b.) # of NTNC water systems required to have certified treatment operators.
- 1c.) # of NTNC water systems returned to compliance.
- 2a.) # of NTNC water systems not meeting treatment requirements.⁹
- 2b.) # of NTNC water systems that need to meet treatment requirements.
- 2c.) # of NTNC water systems returned to compliance.

OBJECTIVE THREE: Review all plans and specifications for non-community water system infrastructure improvements in a consistent and timely manner.

INDICATORS:

- 1.) Total number of plans and specifications for infrastructure improvements⁵ submitted.
- 2.) Total number of plans and specifications reviewed
- 3.) Total number of plans and specifications for infrastructure approved.

- 4.) Number of enforcement actions issued to non-community water systems installing or upgrading infrastructure without required Departmental approval.

OBJECTIVE FOUR: Maximize correction of Public Health Code violations of community water systems (CWS) identified in sanitary surveys

INDICATORS:

- 1.) # of sanitary surveys conducted on CWSs in a 3 year cycle.
- 2a.) # of CWSs with PHC violations identified in sanitary surveys.
- 2b.) # of CWSs returned to compliance

OBJECTIVE FIVE: Maximize correction of Public Health Code violations of non-transient, non-community (NTNC) water systems identified in sanitary surveys

INDICATORS:

- 1.) # of sanitary surveys conducted on NTNC water systems in a 5 year cycle.
- 2a.) # of NTNC water systems with PHC violations identified in sanitary surveys.
- 2b.) # of NTNC water systems returned to compliance.

GOAL FOUR: Maintain an effective public water supply supervision program that supports identified mission, goals and objectives.

OBJECTIVE ONE: Implement elements of the proposed organizational plan that maintains an effective Public Water Supply Supervision Program.

INDICATOR:

- 1.) Hire new staff and incorporate existing staff into the organizational structure of the WSS, consistent with the proposed organizational plan.

OBJECTIVE TWO: Implement the integrated information management system.⁶

INDICATORS:

- 2.) Re-evaluate the integrated information management system work plan and its priorities.
- 3.) Pursue Electronic Data Interchange and Imaging concept for Section utilization.
- 4.) Develop a Section plan to accommodate data entry.

OBJECTIVE THREE: Increase the WSS's capacity and provide information and technical assistance to CT's drinking water constituencies.

INDICATORS:

- 1.) Develop a work plan consistent with the Capacity Development Strategy for the Outreach Program.
- 2.) Assess section participation at educational forums.
- 3.) Evaluate the Consumer Confidence Reports Program.

GOAL FIVE: DEVELOPMENT AND IMPLEMENTATION OF SHORT-TERM PROGRAM INITIATIVES

OBJECTIVE ONE: Develop and implement a Source Water Assessment Program consistent with SDWA requirements

INDICATORS:

- 1.) Create and fill three FTE positions.
- 2.) Monitor the contract with USGS for Tool Box Study for delineation of bedrock wells.
- 3.) Implement the SWAP Work Plan.

OBJECTIVE TWO: Modify existing state regulations and develop new regulations necessary to maintain primacy and protect public health using the established regulatory review procedures

INDICATORS: (Activities relevant to the following EPA Regulations):

- 1.) Progress towards developing Operator Certification program due 2/5/01.
- 2.) Progress towards developing Disinfection By-Products Regulation due 6/16/01.
- 3.) Progress towards developing Interim Enhanced Surface Water Treatment Rule regulation due 6/16/01.
- 4.) Progress towards developing Administrative Penalties Regulation due 5/1/01.
- 5.) Progress towards revising Lead & Copper Regulation due 1/12/02.
- 6.) Progress towards developing Consumer Confidence Report regulation due 2/21/02.
- 7.) Progress towards revising Public Notification Regulation due 5/31/02.
- 8.) Monitor regulatory schedules and request necessary EPA extension agreements.

OBJECTIVE THREE: Development of a Quality Assurance Project Plan in Cooperation with Region 1, New England States

INDICATORS:

- 1.) Develop and implement an ongoing quality system and document this quality system in a Quality Management Plan (QMP) in accordance with "EPA Requirements for Quality Management Plans" (QA/R-2, 11/99) and submit it to EPA for approval.
- 2.) Within 30 days of the effective date of this assistance agreement, the WSS will submit a schedule for the development of a QMP; the date for the submittal of the QMP will be no later than 9/30/01 and will be sent to the EPA Project Officer.
- 3.) The WSS will develop a Quality Assurance Project Plan [QAPP] to support all environmental and public health data operations in accordance with "EPA Requirements for Quality Assurance Project Plans" QA/R-5, 11/99 and/or the EPA NE Compendium Of Quality Assurance Project Plan Requirements and Guidance, 10/99. The term "environmental and public health data operations" refers to activities involving the collection, generation, compilation, analysis, evaluation and use of environmental and public health data.
- 4.) Within 30 days of the effective date of this assistance agreement, the WSS will submit a schedule for the development of the QAPP. The WSS will submit the schedule for QAPP development to the EPA Project Officer.
- 5.) Continue developing the Standard Operating Procedures Manual for the WSS.
- 6.) Identify elements of the Sampling Procedures Manual (finalized) to include within the QAPP and SOP.

OBJECTIVE FOUR: Develop and Implement a Transient Non-Community Program Consistent with the Safe Drinking Water Act Requirements Acceptable to EPA

INDICATORS:

- 1.) Establish a strategy to partner with local health departments and conduct forums by 9/1/01.
- 2.) Evaluate and create FTE positions as necessary to effectively administer the TNC Program by 9/1/01.
- 3.) Develop a TNC enforcement strategy consistent with the Capacity Development strategy by 9/1/01.
- 4.) Develop a strategy to allow for data entry.

OBJECTIVE FIVE: Develop an Outreach Strategy to Assist Systems to Obtain and Maintain Capacity

INDICATORS:

- 1.) Monitor success of technical assistance contracts.
- 2.) Development of outreach materials
- 3.) Submit report to EPA on success of Capacity Development Program by 8/6/01.
- 4.) Revise existing enforcement strategy to be consistent with the Capacity Development strategy.

I. PERFORMANCE MEASURES DEFINITIONS

- 1.) **Cross Connection Reports, Unsatisfactory:** The report does not meet the requirements of 19-13-B102(f)(2)(A) and (B) for protection of distribution system and 19-13-B38a(e)(6) for testing of RPD, DCVA and pressure vacuum breakers.
- 2.) **Cross Connection Reports, Uncorrected Violations, Addressed by Community Water System:** In the cross connection report to the Department, the system is required to report on the status of corrections for cross connection violations. In this context, addressed means that the report documents one or more of the following:
 - 1.) The system has indicated how violation(s) will be corrected.
 - 2.) The system has requested assistance from the local director of health for correction of the violation(s).
 - 3.) The system has terminated service to the entity responsible for the violation.
- 3.) **Cross Connection Reports, Unsatisfactory, Addressed by Department:** Refers to formal and informal enforcement actions issued by the Department. An informal enforcement action is a letter to a system citing a Public Health Code violation. A formal enforcement action is Notice of Violation, a Consent Order, or an Administrative Order.
- 4.) **Formal Enforcement Actions, Not In Compliance:** At the particular point in time of data collection for the PPA, the system has not complied with the requirements of the formal enforcement action.
- 5.) **Infrastructure Improvements:** Pursuant to 19-13-B102(d)(2).
- 6.) **Integrated Information Management System:** A user friendly and properly managed computer system for the storage and processing of accurate information that is readily and uniformly available to section staff in order to perform their job responsibilities.
- 7.) **Plans and Specifications, Review of, Average Number of Days:** Timeframe to include calendar days ranging from date plans or specifications received by region to date plans or specifications are approved or rejected by region. Average by region and then average of regions combined.
- 8.) **Technical Assistance:**
 - a. Site visit- A follow-up site visit.
 - b. Phone call.
 - c. Letter- Other than a violation letter.
- 9.) **Treatment Requirements, Not Meeting:** Pursuant to 19-13-B102(j)(3)(B)(ii) and (iii): residual disinfectant concentration; (j)(4)(A): turbidity levels; (j)(8)(F): optimal water quality control parameters; 19-13-B102(e)(7)(M): minimum chlorine residual; and 19-13-B102(e)(7)(L): fluoride content.
- 10.) **Violations, Non-Reporting, Identified:** For all parameters required by the Federal SDWA.
- 11.) **Violations, Non-Reporting, Not Returning to Compliance:** Systems that have not monitored and reported as required in the compliance period directly following the period covered by the violation.
- 12.) **Violations, Water Quality Standards:** Exceedances of Federal Maximum Contaminant and Action Levels.
- 13.) **Water Quality Reports:** For all parameters required by the Federal SDWA.
- 14.) **Watershed Sanitary Surveys, Uncorrected Violations, Addressed:** In the watershed sanitary survey report to the Department, the system reports on the status of Public Health Code violations cited during the survey. In this context, addressed means that the report documents the system has made an effort to correct these particular violations.

Section Two:

Section Two is organized in two Sections discussing: 1) public outreach efforts of the Water Supplies Section; and 2) The Reporting System section describes how the Water Supplies Section developed a system to cumulatively collect and enter data relevant to programmatic areas of responsibility.

I. OUTREACH AND ASSISTANCE:

The DPH utilized over \$300,000 in the 2% Technical Assistance Set-aside funds in the DWSRF to provide small (less than 10,000 people) system technical assistance. The Public Outreach Unit developed and executed personal service contracts with 5 separate and diverse professional organizations. The contract's objective was to initiate, promote, and manage a Statewide program that provides training, education and technical assistance information to the owners and operators of CT's PWS that serves less than 10,000 people. The organization and responsibilities follow:

CT Section of the American Water Works Association (CTAWWA)

The 1999-2000 contract developed all the areas of the program, completed objectives, and will be continued in the current 2001 contract period. The CTAWWA will continue to; operate the 24 hour toll-free assistance service for Connecticut PWS's, develop and distribute by mailing four (4) quarterly newsletters to all targeted PWS's serving less than ten thousand (10,000) population, provide and coordinate three distinct technical workshops and one concerning Operator Certification Test Review in Connecticut, and coordinate and administer a scholarship program targeting small PWS's operator's.

The current 2001 contract will be applicable to the 2001 CTAWWA Annual Technical Conference, which will include one of the specialized workshops, with appropriate Continuing Education Units (CEUs) applicable towards Operator Certification. Also funded, is the participation in a statewide Public Service Announcement (PSA) campaign that will be developed and will produce 12 PSAs specific to drinking water issues, in cooperation with the CT AWWA and the Connecticut Water Works Association.

CT Council of Small Towns (COST)

During the 1999-2000 contract, COST organized a Small Town Public Water System Advisory Council (STPWSAC), the organization and coordination of all STPWSAC meetings, completed a needs assessment concerning technical and health prevention information and technical training needs of small PWSs, and the coordination of two regional small town PWS conferences. The development and coordination of an awards and recognition program for small PWS owners/operators was not completed because it was determined by the STPWSAC that such a program is difficult to define and determine in the public's view of what are "Best Practices" for systems, especially if a violation occurred.

In 2001, COST will organize and develop meetings of a Public Water System Advisory Council (PWSAC), development and coordination of four (4) quarterly meetings for specialized groups that have a "stake" in public drinking water that the DPH, WSS has targeted; and a needs assessment concerning technical and health prevention information and technical training needs of small PWSs.

University of CT (UConn) Waterborne Disease Center (WDC)

The 1999-2000 contract allowed for UConn to develop a draft introductory core curriculum. This was to be used by the DPH, WSS and the contractor in providing generic information on waterborne diseases and water quality. Generic camera ready fact sheets useable by the DPH, WSS and suitable for dissemination by UConn were to be developed. The WDC coordinated two (2) full day regional workshops that targeted the owners/operators of small PWSs and other small town and local government "stakeholders" that are directly involved with small community and non-community PWSs serving less than 10,000 people. The workshops served as a forum to utilize the contractor-developed draft curriculum and provided for dialog and ongoing action in identifying small PWSs and, in small town and local government issues and needs. It also promoted improvements in maintaining water quality. UConn WDC also developed and implemented, a formal program evaluation and assessment

that addressed: draft curriculum objectives, transfer and retention of curricula content, effectiveness of the two (2) regional technical workshops, participants, and participant assessment.

For the 2001 contract year UConn would develop and organize a statewide, high profile conference that would invite leaders in emerging trends in drinking water and technologies to speak on a variety of specific, and possibly controversial issues. This would be orchestrated through the Commissioner's Office of Communications to ensure agency support, identify political speakers and attendees, and to encourage media coverage. It was determined that due to the current activities of the DPH Commissioner's office such a conference of this magnitude would have to be deferred until spring of 2002 to allow for all the support mechanisms and the soliciting of speakers.

Atlantic States Rural Water and Waste Water (ASRWWA) and the Connecticut-Rhode Island Rural Water Association (CT-RI RWA)

During 1999-2000, both organizations developed and implemented a specialized circuit rider (on-site technical and operation consultation) program for targeted PWSs; individual small PWSs circuit rider assessment and evaluation reports were completed by the contractor for each small PWS visited, which were then used as a workplan for assisting the PWS owner/operator in improving infrastructure, improving compliance with, and correcting, all identified Federal and State compliance issues, other identified system deficiencies, and recommendations for maintaining water quality. The ASRWWA and the CT-RI RWA provided a final formal report that delineated the success of the circuit rider services offered to small PWSs, identified problems encountered and the resolution(s), assessed and evaluated small PWS improvements in Federal and State compliance issues, infrastructure and water quality, and provided recommendations on identified strengths and weakness of the circuit rider program.

II. REPORTING SYSTEM

WSS developed a calendar year reporting system for the Performance Measures. A spreadsheet reporting format is used where staff report data relevant to their programmatic areas of responsibility. Development of this reporting system required formulation of a set of applicable definitions and instructions. This reporting system is cumulative and data is compiled and entered on a year-to-date basis in each of the four quarters.